

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method of severing and sealing a plurality of layers of film formed of a thermoplastic material, the method comprising the steps of:

heating a cutting edge implement to a temperature between about 600° F and about 800° F for severing and sealing a plurality of layers of the film, the temperature being sufficient to melt but not to burn the a thermoplastic material;

feeding [[a]] the plurality of layers of the film between the heated cutting edge implement and an opposing surface;

moving the heated cutting edge implement and the opposing surface relative to one another to pinch the plurality of layers of film therebetween; and

thereafter, suspending any relative lateral movement between the heated cutting edge implement, the plurality of layers of the film, and the opposing surface, while relatively biasing the heated cutting edge implement and the opposing surface together with the plurality of layers of film pinched therebetween, until the cutting edge implement, heated to the temperature between about 600° F and about 800° F, severs the plurality of layers of the film by melting but not burning the plurality of layers, contacts the opposing surface, and seals the plurality of layers of the film together.

2. (previously presented) A method according to claim 1, wherein the moving step comprises the step of advancing the heated cutting edge implement in a direction substantially perpendicular relative to a contact area of the opposing surface.

3. (previously presented) A method according to claim 1, wherein the suspending step comprises synchronously moving the heated cutting edge implement, the film, and the opposing surface in substantially the same lateral direction.

4. (previously presented) A method according to claim 1, wherein the heated cutting edge implement is a hot wire, and further comprising the step of, prior to the moving step, supporting the hot wire for substantially its entire effective cutting length.

5. (cancelled)
6. (cancelled)

7. (previously presented) A method according to claim 1, wherein the suspending step comprises suspending relative lateral movement between the heated cutting edge implement, the film, and the opposing surface for approximately one second.

8. (currently amended) A method of severing and sealing a plurality of layers of film, the method comprising the steps of:

heating a cutting edge implement to a temperature between about 600° F and about 800° F for severing and sealing a plurality of layers of the film, the temperature being sufficient to melt but not to burn ~~the~~ a film;

feeding [[a]] the plurality of layers of the film between the heated cutting edge implement and an opposing surface;

moving the heated cutting edge implement and the opposing surface relative to one another to pinch the plurality of layers of the film therebetween; and

relatively biasing the heated cutting edge implement and the opposing surface together with the plurality of layers of film pinched therebetween, until the cutting edge implement, heated to the temperature between about 600° F and about 800° F, severs the plurality of layers of the film by melting but not burning the plurality of layers and seals the resulting severed edges.

9. (cancelled)

10. (cancelled)

11. (previously presented) A method according to claim 8, wherein the heated cutting edge implement is a hot wire, and further comprising the step of supporting the hot wire for substantially its entire effective cutting length.

12. (previously presented) A method according to claim 8, wherein the moving step comprises pinching the film between the heated cutting edge implement and the other surface for approximately one second.

13. (cancelled)

14. (cancelled)

15. (currently amended) An apparatus for severing and sealing a plurality of layers of film formed of a thermoplastic material, the apparatus comprising:

a cutting edge implement;

a controller for regulating the temperature of the cutting edge implement,
wherein the cutting edge implement is heated to a temperature between about 600° F and
about 800° F for severing and sealing a plurality of layers of film, the temperature being
sufficient to melt but not to burn a thermoplastic material;

~~a cutting edge implement heated to a temperature between about 600° F and~~
~~about 800° F for severing and sealing a plurality of layers of the film, the temperature being~~
~~sufficient to melt but not to burn the thermoplastic material;~~

an anvil;

means for feeding [[a]] the plurality of layers of the film between the heated cutting edge implement and the anvil;

means for moving the heated cutting edge implement and the anvil relative to one another to pinch the plurality of layers of film therebetween; and

means for suspending any relative lateral movement between the heated cutting edge implement, the film, and the anvil, while pressing the heated cutting edge implement toward the anvil with the film pinched therebetween, until the cutting edge implement, heated to the temperature between about 600° F and about 800° F, severs the plurality of layers of the film by melting but not burning the plurality of layers, contacts the anvil, and seals the plurality of layers of the film together.

16. (previously presented) An apparatus according to claim 15, further comprising:

means for laterally moving the heated cutting edge implement along a closed path; and

means for moving the anvil along a path that is at least in part substantially parallel to a portion of the closed path traveled by the heated cutting edge implement.

17. (previously presented) An apparatus according to claim 16, wherein the heated cutting edge implement, the film, and the anvil all synchronously move in substantially the same lateral direction while the plurality of layers of the film is sealed.

18. (previously presented) An apparatus according to claim 15, wherein the heated cutting edge implement is a hot wire that is supported for substantially its entire effective cutting length by an insulating member.

19. (cancelled)

20. (cancelled)

21. (previously presented) An apparatus according to claim 15, wherein the heated cutting edge implement comprises a hot wire.

22. (previously presented) An apparatus according to claim 15, wherein the suspending means suspends any relative lateral movement between the heated cutting edge implement, the film, and the anvil for approximately one second.

23. (currently amended) A method of severing and sealing a plurality of layers of film formed of a thermoplastic material, the method comprising the steps of:

heating a cutting edge implement to a temperature between about 600° F and about 800° F for severing and sealing a plurality of layers of the film, the temperature being sufficient to melt but not to burn the a thermoplastic material;

pinching the plurality of layers of the film between a substrate and the cutting edge implement that is heated to the temperature between about 600° F and about 800° F; and

pressing the cutting edge implement toward the substrate with the plurality of layers of the film pinched therebetween, until the cutting edge implement, heated to the temperature between about 600° F and about 800° F, severs the plurality of layers of the film by melting but not burning the plurality of layers, contacts the substrate, and seals the plurality of layers of the film together.

24. (previously presented) A method according to claim 23, further comprising the step of feeding the plurality of layers of film in a lateral direction, and synchronously moving the substrate and the heated cutting edge implement in the lateral direction during the pinching and pressing steps.

25. (cancelled)

26. (previously presented) A method according to claim 23, wherein the heated cutting edge implement is a hot wire, and further comprising the step of, prior to the pinching and pressing steps, supporting the hot wire for substantially its entire effective cutting length.

27. (currently amended) An apparatus for severing and sealing a plurality of layers of film formed of a thermoplastic material, the apparatus comprising:

a cutting edge implement;

a controller for regulating the temperature of the cutting edge implement,
wherein the cutting edge implement is heated to a temperature between about 600° F and
about 800° F for severing and sealing a plurality of layers of film, the temperature being
sufficient to melt but not to burn a thermoplastic material;

~~a cutting edge implement that is heated to a temperature between about 600° F and about 800° F for severing and sealing a plurality of layers of the film, the temperature being sufficient to melt but not to burn the thermoplastic material;~~

an insulating insert for supporting the heated cutting edge implement;

a base member for supporting the insulating insert;

an anvil for placement adjacent to the heated cutting edge implement on a side of the heated cutting edge implement opposite from the insulating insert and the base member;

means for feeding [[a]] the plurality of layers of the film between the heated cutting edge implement and the anvil;

means for moving the heated cutting edge implement and the anvil relative to one another to pinch the plurality of layers of the film therebetween; and

means for suspending any relative lateral movement between the heated cutting edge implement, the film, and the anvil, while pressing the heated cutting edge implement toward the anvil with the plurality of layers of the film pinched therebetween, until the cutting edge implement, heated to the temperature between about 600° F and about 800° F, severs the plurality of layers of the film by melting but not burning the plurality of layers, contacts the anvil, and seals the plurality of layers of the film together.

28. (previously presented) An apparatus according to claim 27, further comprising:

means for laterally moving the heated cutting edge implement along a closed path; and

means for moving the anvil along a path that is at least in part substantially parallel to a portion of the closed path traveled by the heated cutting edge implement.

29. (previously presented) An apparatus according to claim 28, wherein the heated cutting edge implement, the film, and the anvil all synchronously move in substantially the same lateral direction while the film is sealed.

30. (previously presented) An apparatus according to claim 27, wherein the heated cutting edge implement is a hot wire that is supported for substantially its entire effective cutting length by the insulating insert.

31. (cancelled)

32. (cancelled)

33. (previously presented) An apparatus according to claim 27, wherein the heated cutting edge implement comprises a hot wire.

34. (previously presented) An apparatus according to claim 27, wherein the suspending means suspends any relative lateral movement between the heated cutting edge implement, the film, and the anvil for approximately one second.

35. (previously presented) An apparatus according to claim 27, wherein the insulating insert is made of either mica or ceramic glass.

36. (currently amended) An apparatus for severing and sealing a plurality of layers of film formed of a thermoplastic material, the apparatus comprising:

a cutting edge implement;

a controller for regulating the temperature of the cutting edge implement,
wherein the cutting edge implement is heated to a temperature between about 600° F and
about 800° F for severing and sealing a plurality of layers of film, the temperature being
sufficient to melt but not to burn a thermoplastic material;

~~a cutting edge implement heated to a temperature between about 600° F and~~
~~about 800° F for severing and sealing a plurality of layers of the film, the temperature being~~
~~sufficient to melt but not to burn the thermoplastic material;~~

an anvil;

feed rollers for feeding the plurality of layers of the film between the heated cutting edge implement and the anvil;

at least one actuator for moving the heated cutting edge implement and the anvil relative to one another to pinch the plurality of layers of film therebetween, and for pressing the heated cutting edge implement toward the anvil with the plurality of layers of the film pinched therebetween, until the cutting edge implement, heated to the temperature between about 600° F and about 800° F, severs the plurality of layers of the film by melting but not burning the plurality of layers, contacts the anvil, and seals the resulting severed edges.

37. (previously presented) An apparatus according to claim 36, further comprising:

a first cam apparatus for laterally moving the heated cutting edge implement along a closed path; and

a second cam apparatus for moving the anvil along a path that is at least in part substantially parallel to a portion of the closed path traveled by the heated cutting edge implement.

38. (previously presented) An apparatus according to claim 37, wherein the heated cutting edge implement, the film, and the anvil all synchronously move in substantially the same lateral direction while the plurality of layers of the film is sealed.

39. (previously presented) An apparatus according to claim 36, wherein the heated cutting edge implement is a hot wire that is supported for substantially its entire effective cutting length by an insulating member.

40. (previously presented) An apparatus according to claim 36, wherein the heated cutting edge implement comprises a hot wire.